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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,521	01/09/2006	Jun Hirano	L9289.04191	7130

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EXAMINER

ANWAR, MOHAMMAD S

ART UNIT	PAPER NUMBER
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2463

MAIL DATE	DELIVERY MODE
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02/17/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,521	Applicant(s) HIRANO ET AL.	
	Examiner MOHAMMAD ANWAR	Art Unit 2463	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24,26 and 28-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24,26,28-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/09 has been entered.

Response to Arguments

Applicant's arguments filed 12/21/09 have been fully considered but they are not persuasive. Please see response below:

In response to applicant arguments, Kohno does not disclose the Applicants' claimed subject matter of intermittent communication or retransmitting data in a sleeping period of intermittent communication. In summary, Shohara discloses communicating data in an active period of intermittent communication and Kohno discloses sending a retransmission packet upon receiving a NACK signal. The combined teachings of Shohara and Kohno seem to suggest communicating a retransmission packet in an active period of intermittent communication upon receiving a NACK signal. By contrast to the teachings of Shohara and Kohno, the Applicants' claimed subject matter recites communicating a retransmission packet in a sleeping period of intermittent

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communication upon receiving a NACK signal (see Kohno column 25 lines 38-40, receiving retransmitted packets in standby mode).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 24, 26 and 28-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shohara et al. (U.S. Patent No. 6,804,503 B2) in view of Kohno et al. (U.S. Patent No. 7,502,818 B2).

For claims 24 and 38, Shohara et al. disclose transmitting, by a communication terminal accommodation apparatus, a signal to allow intermittent communication, to a communication terminal apparatus (see column 7 lines 21-23, mode control logic), the intermittent communication including a pre-determined sleeping period and a predetermined active period (see column 7 lines 21-23, specified event time for active mode and sleep mode); upon receiving the signal to allow intermittent communication, performing data communication in the intermittent communication mode only in a period to carrying out data communication using the predetermined active period of the intermittent communications (see column 10 lines 40-42, column 11 lines 39-57, column 15 lines 46-48, where a scheduler schedules the time of events and sleep mode and switching back and forth). Shohara et al. disclose all the subject matter but fails to mention upon receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus, performing a retransmission of the data communication using the pre-determined sleeping period of the intermittent communication. However, Kohno et al. from a similar field of endeavor disclose upon receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus (see column 24 lines 19-22), performing a retransmission of

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the data communication using the pre-determined sleeping period of the intermittent communication (see column 25 lines 38-40, receiving retransmitted packets in standby mode). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Kohno et al. retransmission scheme into Shohara et al. intermittent transmission scheme. The method can be implemented in a frame. The motivation of doing this is to detect and control data loss (see column 2 lines 60-65).

For Claims 26 and 39, Shohara et al. disclose a radio reception section that receives a signal to allow intermittent communication, from a communication terminal accommodation apparatus (see Figure 1, 26, intermittent communication device), the intermittent communication including a pre-determined sleeping period and a pre-determined active period (see column 7 lines 21-23, specified event time for active mode and sleep mode); a control section that enters an intermittent communication mode upon receiving the signal (see column 7 lines 8--11); and a radio communication section that performs data communication using the active period of the intermittent communication (see column 11 lines 38-43, column 7 lines 8-11, active or sleep mode at specified event times),. Shohara et al. disclose all the subject matter but fails to mention wherein the radio communication section, upon receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus, performs a retransmission of the data communication using the predetermined sleeping period of the intermittent communication. However, Kohno et al. from a similar field of endeavor disclose wherein the radio communication section, upon receiving a negative acknowledgment (NACK) signal from the communication terminal

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accommodation apparatus, performs a retransmission of the data communication using the predetermined sleeping period of the intermittent communication (see column 25 lines 38-40, receiving retransmitted packets in standby mode). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Kohno et al. retransmission scheme into Shohara et al. intermittent transmission scheme. The method can be implemented in a frame. The motivation of doing this is to detect and control data loss (see column 2 lines 60-65).

For claims 28 and 40, Shohara et al. disclose the communication terminal apparatus comprises: a radio reception section that receives the signal to allow intermittent communication, from the communication terminal accommodation apparatus (see Figure 1), a control section that enters an intermittent communication mode upon receiving the signal(see column 7 lines 5-12); and a radio communication section that performs data communication using the predetermined active period of the intermittent communication (see column 7 lines 10-11, specified event times). Shohara et al. disclose all the subject matter but fails to mention a transmission section that transmits a signal to allow intermittent communication and a negative acknowledgment (NACK) signal; the radio communication section, upon receiving the negative acknowledgment (NACK) signal, the intermittent communication including a predetermined sleeping period and a predetermined active period. However, Kohno et al. from a similar field of endeavor disclose a transmission section that transmits a signal to allow intermittent communication and a negative acknowledgment (NACK) signal (see Figure 2, 201, a transmitter circuitry); the radio communication section, upon

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receiving the negative acknowledgment (NACK) signal, the intermittent communication including a predetermined sleeping period and a predetermined active period (see column 25 lines 39-40). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Kohno et al. retransmission scheme into Shohara et al. intermittent transmission scheme. The method can be implemented in a frame. The motivation of doing this is to detect and control data loss (see column 2 lines 60-65).

For claims 29, 32, 35, 36 and 37, Shohara et al. disclose wherein the predetermined active period is a frame to perform the data communication (see column 11 lines 52-54).

For claims 30, 31, 33 and 34, Shohara et al. disclose wherein performing the retransmission of the data communication using the predetermined sleeping period comprises continuing the predetermined active period (see column 7 lines 21-23, specified event time for active mode and sleep mode). Shohara et al. disclose all the subject matter but fails to mention wherein performing the retransmission of the data communication using the predetermined sleeping period. However, Kohno et al. from a similar field of endeavor wherein performing the retransmission of the data communication using the predetermined sleeping period comprises continuing the predetermined active period see column 25 lines 39-40). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Kohno et al. retransmission scheme into Shohara et al. intermittent transmission

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scheme. The method can be implemented in a frame. The motivation of doing this is to detect and control data loss (see column 2 lines 60-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ANWAR whose telephone number is (571)270-5641. The examiner can normally be reached on Monday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick W. Ferris can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MOHAMMAD ANWAR
Examiner
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/M. A./

Examiner, Art Unit 2463

/Derrick W Ferris/

Supervisory Patent Examiner, Art Unit 2463